



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

December 13, 2004
Subject: Farmingdale
Project No's STP-1853(30)X
& STP-1853(310)X
Pin No. 1853.30 & 1853.31
Bid Amendment No. 1

Dear Sir/Ms.:

Delete in its entirety the "Schedule of Items" dated 041119, fourteen pages total and replace with the new attached "Schedule of Items" dated 041213, fourteen pages total.

Delete in its entirety "Special Provision Section 107 Time (Limitation of Operations and Supplemental Liquidated Damages)" one page, dated November 17, 2004 and replace with the attached "Special Provision Section 107 Time (Limitation of Operations and Supplemental Liquidated Damages)" one page, dated December 10, 2004.

Delete "Special Provision Section 525 (Fieldstone Retaining Wall)" four pages, dated October 20, 2004 and replace with the attached "Special Provision Section 525 (Fieldstone Retaining Wall)" four pages, dated October 26, 2004.

Add the attached one page entitled "Special Provision Section 652 Maintenance of Traffic (Traffic Control)" dated December 9, 2004.

Please make the following changes in **pen and ink** to your Bid Documents:

In "Special Provision Section 652 Maintenance of Traffic" **Temporary Centerline-** second paragraph, **delete** "markers" and replace with "painted pavement marking lines."

In "**Section 02615 Ductile Iron Pipe**" Section 1.2 entitled "**Quality Assurance**" Add the following new note No. 9:

9. Ductile iron pipe will only be accepted in 6.1 meter (20 foot) lengths, as standardized by the Gardiner Water District."



PRINTED ON RECYCLED PAPER

In "**Section 02642 Corporation Stops**" Section 2.1 entitled "**Materials**" delete the following:

3. Or Equivalent

In "**Section 02643 Curb Stops**" section 1.2 entitled "**Quality Assurance**" delete the following:

3. Or Equivalent

In "**Section 02644 Hydrant Assemblies**" section 1.2 entitled "**Quality - Assurance**" add the following to No.1 under section C.

1. "Waterous-Pacer, as standardized by the Gardiner Water District".

In "**Section 02644 Hydrant Assemblies**" section 1.2 entitled "**Quality - Assurance**" delete the following:

2. "Or approved equal"

Please make the following changes to the plan sheets:

On Plan Sheet No. 4 of 162 entitled "Estimated Quantities and Summery of Earth Work" **add** the following Items:

604.092 Catch Basin Type B1-C-41 Each
613.319 Temporary Erosion Control Blanket-200 M2
534.75 Extension of Box Culvert Sta 12+836, 1 LS

On Plan Sheet No. 4 of 162 entitled "Estimated Quantities and Summery of Earth Work" **delete** the following Items:

603.219 900 MM Culvert Pipe Option III -17-M
604.072 Catch Basin Type B1-C-41 - Each

On Plan Sheet No. 4 of 162 entitled "Estimated Quantities and Summery of Earth Work" make the following change in pen and ink:

Item 823.331-6-inch Gate Valves -11 each - **delete 11 each and replace with 3 each.**

On Plan Sheet No. 7 of 162 entitled "General Notes" **Earthwork and Pavement-** **add** the following to General Note No. 2:

"and will be incidental to related contract Items"

On Plan Sheet No. 7 of 162 entitled "General Notes" **Earthwork and Pavement-**
delete note No. 4 in its entirety:

4. Any stumps removed for this Project shall be paid for under Item 201.24, removing stumps. However, where directed by the resident, Item 631.20, stump chipper rental (incl. operator) may be used to remove stumps

On Plan Sheet No. 8 of 162 entitled "General Notes" **Erosion Control** –
add the following to Note No. 1:

"Payment will be made under item 613.319."

On Plan Sheet No. 8 of 162 entitled "General Notes" **Erosion Control** –
delete note No. 7 in its entirety:

7. Temporary erosion control measures shall be maintained as directed by the resident. Payment will be made under items 629.05 hand labor; 631.12, All purpose excavator; and 631.172 Truck large.

The Department has received the following Requests for information:

Q) Re: Item 635.31 Prefabricated Concrete Block, Gravity Wall

The cobblestone faced wall specified has a thin flat cap block. This cap has a large finished horizontal surface area compared to the thin vertical face.

Payment for the "exposed vertical face" per spec would not reflect the true cost or value of the cap blocks.

What is the practice (Farmington) in paying for these cap stones?

R) The cap stones and end blocks should be included in the estimate of cost. No separate payment will be made.

Q) Special Provisions Section 105, requires 2-way traffic be maintained after 3:30 p.m. – this will impact production, slow the project, and increase costs to the MaineDOT. Since at least 2 alternate routes exist for avoiding the construction area, is there any possibility that this Section 105 could be waived?

R) No

Q) Item # 607.163 will posts for fence be allowed to be driven or will sonotube w/concrete be required for posts next to retaining walls.

R) Posts will be allowed to be driven for Item #607.163

Q) Item # 607.42 is there a detail of this fence. If not please provide one, so materials needed may be determined.

R) Item #607.42. There is no drawing detail for this, but the Special Provision that is written describes in detail what the intent is for the fence. The only final detail is the color of the stain used for the fence, which is directed by the Resident Engineer with abutter's input.

Q) Item # 607.163 if posts are to be driven w/diagonal anchor blades. Would MDOT accept an additional 1 foot of post embedment in lieu of drive anchors. Total post embedment of 4' as opposed to 3' depth.

R) Yes

Q) Is the intent to use b1-C with the type 3 curb?

R) Please refer to the new "Schedule of Items" as referenced in this amendment.

Consider these changes prior to submitting your bid on December 15, 2004.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Bickford".

Scott Bickford

Contracts & Specifications Engineer

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 001853.30

PROJECT(S) : STP-1853(30)X
STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
SECTION 0001 HIGHWAY ITEMS				
0010	201.23 REMOVING SINGLE TREE TOP ONLY	57.000 EA		
0020	201.24 REMOVING STUMP	75.000 EA		
0030	202.11 REMOVING PORTLAND CEMENT CONCRETE PAVEMENT	6000.000 M2		
0040	202.15 REMOVING MANHOLE OR CATCH BASIN	12.000 EA		
0050	203.20 COMMON EXCAVATION	23000.000 M3		
0060	203.21 ROCK EXCAVATION	850.000 M3		
0070	203.25 GRANULAR BORROW	3500.000 M3		
0080	206.061 STRUCTURAL EARTH EXCAVATION - DRAINAGE AND MINOR STRUCTURES, BELOW GRADE	60.000 M3		
0090	206.07 STRUCTURAL ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	41.000 M3		

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 001853.30

PROJECT(S) : STP-1853(30)X
STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0100	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	20760.000 M3				
0110	310.24 PLANT MIX RECYCLED ASPHALT PAVEMENT - 100 MM DEPTH	19300.000 M2				
0120	403.207 HOT MIX ASPHALT 19.0 MM NOMINAL MAX SIZE	3900.000 MG				
0130	403.208 HOT MIX ASPHALT 12.5 MM, SURFACE	2600.000 MG				
0140	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTAL)	970.000 MG				
0150	403.211 HOT MIX ASPHALT (SHIM)	70.000 MG				
0160	409.15 BITUMINOUS TACK COAT APPLIED	4150.000 L				
0170	525.326 FIELD STONE RETAINING WALL	15.000 M2				
0180	534.75 EXTENSION OF EXISTING BOX CULVERT	LUMP	LUMP			
0190	534.75 EXTENSION OF EXISTING BOX CULVERT @ STA. 12+836	LUMP	LUMP			

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 001853.30

PROJECT(S) : STP-1853(30)X
STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
0200	603.159 300 MM CULVERT PIPE OPTION III M	36.000		
0210	603.179 450 MM CULVERT PIPE OPTION III M	224.000		
0220	603.195 600 MM RCP CLASS III M	5.000		
0230	603.1952 600 MM REINFORCED CONCRETE PIPE CLASS V M	57.000		
0240	603.199 600 MM CULVERT PIPE OPTION III M	52.000		
0250	604.092 CATCH BASIN TYPE B1-C EA	41.000		
0260	604.096 1500 MM CATCH BASIN TYPE B1-C EA	5.600		
0270	604.15 MANHOLE EA	1.000		
0280	604.153 1500 MM MANHOLE EA	1.000		
0290	604.154 1800 MM MANHOLE EA	5.200		
0300	604.16 ALTERING CATCH BASIN TO MANHOLES EA	2.000		

SCHEDULE OF ITEMS

REVISED:

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STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
0310	604.166 REBUILDING MANHOLE	30.000 EA				
0320	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	57.000 EA				
0330	604.23 STEP	10.000 EA				
0340	604.2402 BEHIND CURB CATCH BASIN	2.000 EA				
0350	604.244 CATCH BASIN TYPE F4	2.000 EA				
0360	604.247 CATCH BASIN TYPE F5-C	1.000 EA				
0370	604.262 CATCH BASIN TYPE B5-C	1.000 EA				
0380	605.09 150 MM UNDERDRAIN TYPE B	1580.000 M				
0390	605.10 150 MM UNDERDRAIN OUTLET	6.000 M				
0400	605.11 300 MM UNDERDRAIN TYPE C	1280.000 M				
0410	605.13 450 MM UNDERDRAIN TYPE C	154.000 M				

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CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
0420	605.15 600 MM UNDERDRAIN TYPE C	102.000 M		
0430	606.17 GUARDRAIL TYPE 3B - SINGLE RAIL	248.000 M		
0440	606.22 GUARDRAIL TYPE 3B - OVER 4.5 M RADIUS	32.000 M		
0450	606.265 TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	14.000 EA		
0460	606.35 GUARDRAIL DELINEATOR POST	30.000 EA		
0470	606.363 GUARDRAIL REMOVE AND DISPOSE	200.000 M		
0480	607.163 CHAIN LINK FENCE - 1.2 METER P.V.C. COATED	705.000 M		
0490	607.22 CEDAR RAIL FENCE	300.000 M		
0500	607.24 REMOVE AND RESET FENCE	20.000 M		
0510	607.35 BRACING ASSEMBLY CHAIN LINK FENCE PVC COATED COATED	10.000 EA		
0520	607.42 ORNAMENTAL PICKET FENCE	75.000 M		

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
0530	609.111 SPECIAL GRANITE CURB - 600 MM	125.000 M		
0540	609.31 CURB TYPE 3	3395.000 M		
0550	610.08 PLAIN RIPRAP	250.000 M3		
0560	610.16 HEAVY RIPRAP	100.000 M3		
0570	613.319 EROSION CONTROL BLANKET	200.000 M2		
0580	615.07 LOAM	430.000 M3		
0590	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY	74.000 UN		
0600	618.1411 SEEDING METHOD NUMBER 3 - PLAN QUANTITY	11.000 UN		
0610	619.1201 MULCH - PLAN QUANTITY	85.000 UN		
0620	620.58 EROSION CONTROL GEOTEXTILE	250.000 M2		

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
0630	621.025 EVERGREEN TREES (900 MM - 1200 MM) GROUP A	18.000 EA		
0640	621.026 EVERGREEN TREES (900 MM - 1200 MM) GROUP B	6.000 EA		
0650	621.027 EVERGREEN TREES (900 MM - 1200 MM) GROUP C	3.000 EA		
0660	621.032 EVERGREEN TREES (1200 MM - 1500 MM) GROUP B	6.000 EA		
0670	621.121 SMALL DECIDUOUS TREES (1500 MM - 1800 MM) GROUP B	30.000 EA		
0680	621.126 SMALL DECIDUOUS TREES (1800 MM - 2400 MM) GROUP A	18.000 EA		
0690	621.267 LARGE DECIDUOUS TREE (45 MM - 50 MM CALIPER) GROUP A	18.000 EA		
0700	621.389 DWARF EVERGREENS (375 MM - 450 MM) GROUP A	42.000 EA		
0710	621.51 DECIDUOUS SHRUBS (375 MM - 450 MM) 	244.000 EA		
0720	621.547 DECIDUOUS SHRUBS (600 MM - 900 MM) GROUP B	24.000 EA		
0730	621.71 HERBACEOUS PERENNIALS GROUP A 	120.000 EA		

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0740	621.80 ESTABLISHMENT PERIOD	LUMP	LUMP			
0750	622.09 TRANSPLANTING HEDGE	60.000 M				
0760	622.10 TRANSPLANTING SHRUB	7.000 EA				
0770	627.711 WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE (PLAN QUANTITY)	9500.000 M				
0780	627.75 WHITE OR YELLOW PAVEMENT AND CURB MARKING	130.000 M2				
0790	627.78 TEMPORARY 100 MM PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	10000.000 M				
0800	629.05 HAND LABOR, STRAIGHT TIME	40.000 HR				
0810	631.10 AIR COMPRESSOR (INCLUDING OPERATOR)	20.000 HR				
0820	631.11 AIR TOOL (INCLUDING OPERATOR)	20.000 HR				
0830	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20.000 HR				
0840	631.13 BULLDOZER (INCLUDING OPERATOR)	40.000 HR				

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STP-1853(310)X

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
0850	631.14 GRADER (INCLUDING OPERATOR)	20.000 HR		
0860	631.15 ROLLER, EARTH AND BASE COURSE (INCLUDING OPERATOR)	20.000 HR		
0870	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	40.000 HR		
0880	631.18 CHAIN SAW RENTAL (INCLUDING OPERATOR)	10.000 HR		
0890	631.20 STUMP CHIPPER (INCLUDING OPERATOR)	20.000 HR		
0900	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	20.000 HR		
0910	631.36 FOREPERSON	20.000 HR		
0920	635.14 PREFABRICATED CONCRETE MODULAR GRAVITY WALL	310.000 M2		
0930	635.31 PREFABRICATED CONCRETE BLOCK GRAVITY WALL	100.000 M2		
0940	637.071 DUST CONTROL	LUMP	LUMP	
0950	639.18 FIELD OFFICE TYPE A	1.000 EA		

SCHEDULE OF ITEMS

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STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0960	639.21 TESTING FACILITIES SOILS	LUMP	LUMP			
0970	642.15 PRECAST CONCRETE STEPS	1.000 EA				
0980	645.291 ROADSIDE GUIDE SIGNS TYPE II	8.000 M2				
0990	652.31 TYPE I BARRICADE	20.000 EA				
1000	652.311 TYPE II BARRICADE	10.000 EA				
1010	652.33 DRUM	80.000 EA				
1020	652.34 CONE	100.000 EA				
1030	652.35 CONSTRUCTION SIGNS	80.000 M2				
1040	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	LUMP	LUMP			
1050	652.38 FLAGGER	3000.000 HR				

SCHEDULE OF ITEMS

REVISED:

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STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
1060	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
1070	658.20 ACRYLIC LATEX COLOR FINISH, GREEN	20.000 M2				
1080	659.10 MOBILIZATION	LUMP	LUMP			
1090	660.21 ON-THE-JOB TRAINING (BID)	3000.000 HR				
SECTION 0001 TOTAL						

SECTION 0002 WATER MAIN UTILITIES ITEMS

1100	203.35 CRUSHED STONE FILL	510.000 M3				
1110	206.07 STRUCTURAL ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	39.000 M3				
1120	604.154 1800 MM MANHOLE (PRV STRUCTURE)	1.000 EA				
1130	801.16 150 MM PVC SANITARY SEWER	31.000 M				
1140	803.01 TEST PITS	10.000 EA				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 001853.30

PROJECT(S) : STP-1853(30)X
STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1150	803.16 1.2 M DIAMETER PRECAST SEWER MANHOLE	2.000 EA				
1160	822.321 100 MM CLASS 52 DI PIPE	15.000 M				
1170	822.33 150 MM CLASS 52 DI PIPE	105.000 M				
1180	822.34 200 MM CLASS 52 DI PIPE	145.000 M				
1190	822.36 300 MM CLASS 52 DI PIPE	1540.000 M				
1200	823.311 300MM GATE VALVE WITH BOX	10.000 EA				
1210	823.3251 200MM GATE VALVE WITH BOX	5.000 EA				
1220	823.3253 TAPPING SLEEVE & GATE VALVE WITH BOX	1.000 EA				
1230	823.331 150 MM GATE VALVE	3.000 EA				
1240	823.3351 100MM GATE VALVE WITH BOX	1.000 EA				
1250	824.30 FIRE HYDRANTS	8.000 EA				

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 001853.30

PROJECT(S) : STP-1853(30)X
STP-1853(310)X

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
1260	825.311 19 MM CORPORATION	55.000 EA				
1270	825.312 19 MM CURB STOP	55.000 EA				
1280	825.33 25 MM CORPORATION	10.000 EA				
1290	825.331 25 MM CURB STOP	10.000 EA				
1300	825.41 19 MM COPPER SERVICE	665.000 M				
1310	825.43 25 MM COPPER SERVICE	121.000 M				
1320	827.302 UNSUITABLE MATERIAL EXCAVATION BELOW TRENCH GRADE - GRAVEL BEDDING MATERIAL	255.000 M3				

	SECTION 0002 TOTAL					.

SECTION 0003 RETAINING WALL ALTERNATE 1
ALT GROUP RW1

1330	635.31 PREFABRICATED CONCRETE BLOCK GRAVITY WALL	1270.000 M2				

	SECTION 0003 TOTAL					.

SECTION 0004 RETAINING WALL ALTERNATE 2

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 001853.30

PROJECT(S) : STP-1853(30)X
STP-1853(310)X

CONTRACTOR : _____

LINE	ITEM	APPROX.	UNIT PRICE		BID AMOUNT	
NO	DESCRIPTION	QUANTITY	-----		-----	
		AND UNITS	DOLLARS	CTS	DOLLARS	CTS

ALT GROUP RW2						

1340	636.64 SEGMENTAL RETAINING WALL - SUPPLIER DESIGN - 4' OR GREATER	M2	1270.000			

	SECTION 0004 TOTAL					

	TOTAL BID					

SPECIAL PROVISION
SECTION 107
TIME
(Limitation of Operations)
and
(Supplemental Liquidated Damages)

Where existing pavement carries traffic and is removed to install (or remove) drainage or utility structures, the pavement shall be replaced weekly with a temporary pavement consisting of a minimum of 75 mm [3 inches] of acceptable hot mix asphalt. No separate payment will be made for furnishing, placing, maintaining, and removing temporary pavement and all cost of such work will be considered incidental to the contract.

Where existing travelway pavement is excavated or covered by fill as a part of the general grading operations prior to November 1, 2005, a binder course of hot mix asphalt shall be installed and completed on or before November 1, 2005.

Supplemental liquidated damages shall be assessed the Contractor in the amount of Seven Hundred and Fifty Dollars (\$750.00) per day for each calendar day, beginning November 2, 2005 that above stated binder course remains incomplete. This assessment of supplemental liquidated damages shall be in addition to the liquidated damages per working day, as specified in Section 107 of the Standard Specifications.

Grading operations which excavate or fill over existing pavement being used to carry traffic shall be suspended on November 1, 2005 and not be resumed until the Spring of 2006.

SPECIAL PROVISION
SECTION 525
(Fieldstone Retaining Wall)

Description. This work shall consist of supplying material for and constructing a Fieldstone Retaining Wall (FSRW) in accordance with these specifications and in reasonably close conformity with the lines, grades, design and dimensions shown on the plans and Special Details, or as directed by the Engineer.

An FSRW will consist of the following components:

A leveling pad - a 450 mm (18 inch) thick bed of crushed stone used to provide a level surface to place wall stones.

Wall stones - hard, durable, flat quarried stones or fieldstones with flat faces in a mixture of sizes to be stacked in a compact and stable mass.

Filter Fabric - drainage geotextile as shown on the plans.

Backfill - soil is placed behind the FSRW and crushed stone fill.

Foundation - soil mass supporting the FSRW.

Drainage - underdrain pipe or other positive drainage system approved by the Engineer.

Design Requirements.

Drainage System - A positive drainage system to drain water from behind the wall and reduce freeze-thaw action of subsurface soils shall be included in the design of the FSRW.

Crushed Stone Drainage Layer - A vertical layer of crushed stone shall be placed between the back of the wall stones and the backfill to promote drainage and prevent ice damage to the FSRW.

Design Life - The design life of the wall shall be 50 years unless otherwise noted on the plans.

Leveling Pad Location - The top of the leveling pad shall be designed so that the embedment depth of the FSRW is adequate to maintain stability. The minimum embedment depth to the top of the pad shall be 305 mm (12 inches).

Design Approval. The wall must be similar in appearance to that shown in the attached photograph.

Construction. The FSRW shall be built by a skilled mason thoroughly experienced in this type of wall construction.

1. The foundation shall have sufficient strength to maintain global stability of the FSRW. The insitu soils may be used at the direction of the engineer.
Foundation soils shall be brought to the desired grade as required for footing and base dimensions shown on the construction drawings or as directed by the Engineer.
2. The leveling pad shall be placed to the lines and grades as shown on the construction drawings, and shall have a minimum thickness of 450 mm (18 inches). The leveling pad shall extend at least 75 mm beyond the wall stones in all directions. Steps in the leveling pad shall have a minimum overlap of 200 mm (8 inches).
3. The backfill used behind the wall shall meet the requirements of Granular Borrow, MDOT Standard Specification 703.19, Material for Embankment Construction. Backfill shall be placed, spread, and compacted from the back of the crushed stone drainage layer toward the limits of the excavation. Backfill shall be placed in lifts not to exceed 200 mm (8 inches) and compacted with lightweight, hand operated compaction equipment. Backfill beyond 1 meter (3 feet) from the back of the crushed stone shall be compacted to 95% of the maximum density as determined by AASHTO T-180, Method C or D. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be within 2 percentage points dry of optimum.
4. The filter fabric shall be a geotextile meeting the requirements of MDOT Standard Specification Subsection 722.02, Drainage Geotextile. It shall be placed between the native soils and the leveling pad and backfill.
5. The wall shall be constructed of hand fitted fieldstone or quarried stone. The stones shall be placed such that a minimum of 1800 kg of palletized stone is used for each m³ of wall (1.5 tons/cy).
6. Joints shall be level and horizontal; only short vertical joints will be allowed and no more than two vertical joints may be stacked above each other. Stones shall be stacked in a manner such that diagonal joints are kept to a minimum. Joint size in the face of the wall should be kept to a minimum and should not exceed 38 mm (1.5 inches).

7. The top of the wall should be at least 400 mm (16 inches) wide. The width of the base should be approximately $\frac{2}{3}$ of the wall height, with a gradual taper from the base to the top of the wall. Stones shall be placed so the face of the wall has a minimum batter of 1:12.
8. A hand fitted course of cap stones shall be placed on top of the wall. This shall be constructed of stones of similar size and thickness. Each stone in the cap shall be of sufficient size to withstand accidental movement.

Method of Measurement. Field Stone Retaining Wall will be measured by the square meter (square foot) of front surface not to exceed the measurements shown on the plans or as authorized by the Engineer. Vertical dimension limits will be from the top of the leveling pad to the top of the cap stone layer. Horizontal dimension limits will be from each end of the wall.

Basis of Payment. The accepted quantity of Field Stone Retaining Wall will be paid for at the contract unit price per square meter (square foot), complete, cleaned of debris and accepted in place. The unit price shall be full compensation for excavation, backfill, and grading beyond the face of the wall and furnishing all materials, labor, equipment, and other incidentals including drainage necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
525.326	Field Stone Retaining Wall	Square meter (Square foot)

Farmingdale, Route 201
PIN 1853.30
October 26, 2004
Special Provision Section 525



SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC
(Traffic Control)

Failure by the contractor to follow the Contracts 652 Special Provisions and/or The Manual on Uniform Traffic Control Devices (MUTCD) and/or The Contractors own Traffic Control Plan will result in a reduction in payment, computed by reducing related 652 items by a total of 5% per occurrence. The Departments Resident or any other representative of The Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this Special Provision.